

NEC3 Engineering & Construction Contract

|  |  |  |
| --- | --- | --- |
| **Between** | **ESKOM HOLDINGS SOC Ltd (Reg No. 2002/015527/30)** |  |
| **and** |  |  |
| **for** | **Supply and deliver of three (3) LPG plates and one (1) Electric plate hybrid cooking stoves, LPG Heaters with two(2) 9KG LPG Cylinders and Supply, deliver and install ceiling insulation (SPF and Ceiling boards), electrical re-wiring ,Supply of CFL and asbestos removal and disposal for Air Quality Offset Project on and “as and when required basis” for Various Sites in Mpumalanga and Free State (Emzinoni Plus (3440), Thubelihle (2390), Silobela (2003), Masakhane (886) and Free State Refengkgotso ( 500)Insert title of the works** |  |
| **Content:** |  |  |
| **Part C1** | **Agreements & Contract Data** | **[●]** |
| **Part C2** | **Pricing Date** | **[●]** |
| **Part C3** | **Scope of Work** | **[●]** |
| **Part C4** | **Site Information** | **[●]** |
| **CONTRACT No.** |  |  |

Part C1: Agreements & Contract Data

|  |  |  |
| --- | --- | --- |
| **Contents:** |  | **No of pages** |
| **C1.1** | **Form of Offer and Acceptance**  **[to be inserted from Returnable Documents at award stage]** |  |
| **C1.2a** | **Contract Data provided by the *Employer*** |  |
| **C1.2b** | **Contract Data provided by the *Contractor***  **[to be inserted from Returnable Documents at award stage]** |  |
| **C1.3** | **Proforma Guarantees** |  |

C1.1 Form of Offer & Acceptance

### Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

**Supply and deliver of three (3) LPG plates and one (1) Electric plate hybrid cooking stoves, LPG Heaters with 9KG LPG Cylinders x 2 and Supply, deliver and install ceiling insulation (SPF and Ceiling boards), electrical re-wiring ,Supply of CFL and asbestos removal and disposal for Air Quality Offset Project on and “as and when required basis” for Various Sites in Mpumalanga and Free State (Emzinoni Plus (3440), Thubelihle (2390), Silobela (2003), Masakhane (886) and Free State Refengkgotso ( 500).**

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

|  |  |  |
| --- | --- | --- |
| Option A | The offered total of the Prices exclusive of VAT is | **R** |
|  | Sub total | **R** |
|  | Value Added Tax @ 15% is | **R** |
|  | The offered total of the amount due inclusive of VAT is1 | **R** |
|  | (in words) | |

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

|  |  |
| --- | --- |
| Signature(s) |  |
| Name(s) |  |
| Capacity |  |
| **For the**  **tenderer:** |  |
| *(Insert name and address of organisation)* |  |
| Name & signature of witness | Date |
| Tenderer’s CIDB registration number (if applicable) |  |

1 This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

### Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer’s Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer’s Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance) Part C2 Pricing Data

Part C3 Scope of Work: Works Information Part C4 Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer’s agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy signed between them of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

|  |  |  |
| --- | --- | --- |
| Signature(s) |  |  |
| Name(s) |  |  |
| Capacity |  |  |
| **for the Employer** |  |  |
| *(Insert name and address of organisation)* |  |  |
| Name & signature of  witness |  | Date |

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

### Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

1. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer’s covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

|  |  |  |
| --- | --- | --- |
| No. | Subject | Details |
| 1 | **[●]** | **[●]** |
| 2 | **[●]** | **[●]** |
| 3 | **[●]** | **[●]** |
| 4 | **[●]** | **[●]** |
| 5 | **[●]** | **[●]** |
| 6 | **[●]** | **[●]** |
| 7 | **[●]** | **[●]** |

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **For the tenderer:** |  | **For the Employer** |
| Signature |  |  |  |
| Name |  |  |  |
| Capacity |  |  |  |
| On behalf of | *(Insert name and address of organisation)* |  | *(Insert name and address of organisation)* |
| Name & signature of witness |  |  |  |
| Date |  |  |  |

C1.2 ECC3 Contract Data

**Part one - Data provided by the *Employer***

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

|  |  |  |
| --- | --- | --- |
| **Clause** | **Statement** | **Data** |
| 1 | **General** |  |
| The *conditions of contract* are the core clauses and the clauses for main Option | | |
|  |  | **A: Priced contract with activity schedule** |
|  | dispute resolution Option | **W1: Dispute resolution procedure** |
|  | and secondary Options |  |
|  |  | **X1: Price adjustment for inflation** |
|  |  | **X2 Changes in the law** |
|  |  | **X7: Delay damages** |
|  |  | **X13: Performance bond** |
|  |  | **X16: Retention** |
|  |  | **X17: Low performance damages** |
|  |  | **X18: Limitation of liability** |
|  |  | **Z: *Additional conditions of contract*** |
| of the NEC3 Engineering and Construction Contract, April 2013 (ECC3) | | |
| 10.1 | The *Employer* is (Name): | **Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa** |
|  | Address | **Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg** |
| 10.1 | The *Project Manager* is: (Name) | **Ronald Mandavha** |
|  | Address | **Megawatt Park Maxwell Drive, Sunninghill Sandton** |
|  | Tel | **011 800 8000** |
|  | Fax |  |
|  | e-mail | [**MandavR@eskom.co.za**](mailto:MandavR@eskom.co.za) |
| 10.1 | The *Supervisor* is: (Name) | **Xolelwa Siboza** |

|  |  |  |
| --- | --- | --- |
|  | Address | **Megawatt Park Maxwell Drive, Sunninghill Sandton** |
| Tel No. | **011 800 8000** |
| Fax No. |  |
| e-mail | [SibozaX**@eskom.co.za**](mailto:%20SibozaX@eskom.co.za) |
| 11.2(13) | The *works* are | **Supply and deliver of three (3) LPG plates and one (1) Electric plate hybrid cooking stoves, LPG Heaters with 9KG LPG Cylinders x 2 and Supply, deliver and install ceiling insulation (SPF and Ceiling boards), electrical re-wiring ,Supply of CFL and asbestos removal and disposal for Air Quality Offset Project on and “as and when required basis” for Various Sites in Mpumalanga and Free State (Emzinoni Plus (3440), Thubelihle (2390), Silobela (2003), Masakhane (886) and Free State Refengkgotso ( 500).** |
| 11.2(14) | The following matters will be included in the Risk Register | * **Weather Conditions** * **Delays and Disruptions** * **Community unrest** * **Labor Unrest** * **Late Delivery** * **Participants availability** * **Other to be discussed and addressed during execution where applicable.** |
| 11.2(15) | The *boundaries of the site* are | **-Emzinoni Plus, Bethal**  **- Silobela, Carolina**  **-Masakhane, Duvha**  **-Thubelihle, Kriel**  **-Refengkgotso, Denneysville** |
| 11.2(16) | The Site Information is in | **Part 4: Site Information** |
| 11.2(19) | The Works Information is in | **Part 3: Scope of Work and all documents and drawings to which it make reference.** |
| 12.2 | The *law of the contract* is the law of | **The Republic of South Africa** |
| 13.1 | The *language of this contract* is | **English** |
| 13.3 | The *period for reply* is | * **1 week for all contractual matters** * **Within 24 hours for health and safety matters when it arises.** |
| **2** | **The *Contractor's* main** | **Data required by this section of the core** |

### responsibilities

**3 Time**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 11.2(3) | The *completion date* for the whole of the  *works* is |  | |  |
| 11.2(9) | The *key date*s and the *condition*s to be met are: | ***Condition* to be met** | | ***key date*** |
|  | **1** | **Various Sites** | Programme to be submitted |
|  |  |  |  |
|  |  |  |  |

##### clauses is provided by the *Contractor* in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.

30.1 The *access dates* are: **Part of the Site Date**

**-Various Sites As per approved Schedule**

|  |  |  |
| --- | --- | --- |
| 31.1 | The *Contractor* is to submit a first Programme for acceptance within |  |
|  | **1 week of the Contract Date.** |
| 31.2 | The *starting date* is | **01 April 2025** |
| 32.2 | The *Contractor* submits revised Programme at intervals no longer than |  |
|  | **1 week.** |
| 35.1 | The *Employer* is not willing to take over the *works* before the Completion Date. |  |
| **4** | **Testing and Defects** |  |
| 42.2 | The *defects date* is | **12 months from completion per house in terms of the activity schedule agreed upon at signature of the contract or changed later if applicable.**  **The Contractor will provide a warranty of 12 months should the *Employer* delay installation of hardware, the costs for the extension of the warranty will be for the *Employer*** |
| 43.2 | The *defect correction period* is | **7 days** |
|  | except that the *defect correction period* for  long lead items | **Correction of long lead items will take 4.5 months for delivery. The *Contractor* shall endeavor to reduce the lead time as far as possible. Upon analysis of the defect, the *Contractor* will provide a Programme if the Hardware is a long lead item.** |
|  |  |  |
| **5** | **Payment** |  |
| 50.1 | The *assessment interval* is | **As soon as the supplier complete minimum 25 houses** |
| 51.1 | The *currency of this contract* is the | **South African Rand.** |
| 51.2 | The period within which payments are made is |  |
|  | **60 days after assessment date. Assessment must be concluded within 7 days from date of submission. Failing so the assessment is deemed accepted. Any assessment that is rejected must be resolved within 30 days of first assessment submission, the *Contractor* shall be entitled to invoice the assessment amount for payment”** |
| 51.4 | The *interest rate* is | **the publicly quoted prime rate of interest (calculated on a 365-day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and** |

### Compensation events

60.1(13) The place where weather is to be

##### .

recorded is: Emalahleni

The *weather measurements* to be recorded for each calendar month are,

The *weather measurements* are supplied by

The *weather data* are the records of past *weather measurements* for each calendar month which were recorded at:

|  |  |
| --- | --- |
| 60.1(13) | Assumed values for the ten year return **As stated in the South African Weather Bureau**  *weather data* for each *weather measurement* for each calendar month are:  and which are available from: |

**Contractors shall obtain the weather**

**measurements information from the South African Weather Bureau and Heidelberg weather station.**

**the number of days with rainfall more than 10mm**

**the South African Weather Bureau**

Based on information recorded at the Witbank weather station, the average annual rainfall for the (*to be inserted on award*) area is approximately mm. (Weather Bureau, Pretoria), will be included as per each site on award).

1. **Title There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in**

**this Contract Data.**

### Risks and insurance

|  |  |
| --- | --- |
| 80.1 | These are additional *Employer*'s risks **None** |

1. **Termination There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in**

**this Contract Data.**

### Data for main Option clause

|  |  |
| --- | --- |
| **A** | **Priced contract with activity schedule There is no reference to Contract Data in this**  **Option and terms in italics are identified elsewhere in this Contract Data.** |

1. **Data for Option W1**

W1.1 The *Adjudicator* is **the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see** [**www.ice-sa.org.za**](http://www.ice-sa.org.za/)**).**

|  |  |  |
| --- | --- | --- |
|  |  | **If the Parties do not agree on an Adjudicator, the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).** |
| W1.2(3) | The *Adjudicator nominating body* is: | **the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See** [**www.ice-sa.org.za**](http://www.ice-sa.org.za/) **) or its successor body.** |
| W1.4(2) | The *tribunal* is: | **Arbitration.** |

|  |  |
| --- | --- |
| W1.4(5) | The *arbitration procedure* is **the latest edition of Rules for the Conduct of**  **Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.**  The place where arbitration is to be held is: **South Africa**  The person or organisation who will be chosen as arbitrator   * if the Parties cannot agree a choice or **the Chairman for the time being or his nominee** * if the arbitration procedure does not **of the Association of Arbitrators (Southern**   state who selects an arbitrator, is **Africa) or its successor body.** |

### Data for secondary Option clauses

##### Price adjustment for inflation

The *base date* for indices is **TBC**

The proportions used to calculate the

Price Adjustment Factor are

|  |  |  |
| --- | --- | --- |
| **proportion** | **linked to index for** | **Index prepared by** |
| **Fixed 15%** | **non-adjustable** |  |
| **Material – SPF 40%** | **Table O–2 Coke, petroleum, chemical, rubber and plastic products** | **Seifsa** |
| **Material – Ceiling boards 10%** | **Table G–2(A) Building installation** | **Seifsa** |
| **Material – Wiring 10%** | **Table G–2 (A) Electrical contractors** | **Seifsa** |
| **Material – Paint 3%**  **Labour -15%**  **Overheads -4%**  T**ransport -3%** | **Table M – 6 Paint**  **Table C3 – AHPE**  **Table D–2**  **Table L2–A** | **Seifsa**  **Seifsa**  **Seifsa**  **Seifsa** |
|  |  |  |

Total – 100%

**•Tendered prices will be fixed for the first twelve (12) months after contract signing date and thereafter subject to escalation as indicated above.**

##### X2 Changes in the law The law of the Republic of South Africa

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **X4** | **Parent company guarantee** | [**If a**](https://www.lawinsider.com/clause/parent-company-guarantee-x4-x4)**parent company owns the Contractor, the Contractor gives to the Employer a guarantee by the parent company of the Contractor's performance in the form set out in the Service Information. If the guarantee was not given by the Contract Date, it is given to the Employer within four weeks of the Contract Date.** | | |
| **X5** | **Sectional Completion** |  | | |
| X5.1 | The *completion date* for each *section* of the *works* is: To be discussed on award | ***Section*** | **Description** | ***Completion date*** |
|  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| X7.1 | Delay damages for late Completion of each activity is | 1% of the total price of each activity up to maximum of 7% of the order value | | | |
|  | The total delay damages payable by the  *Contractor* does not exceed: | **5% of the specific activity**  **Each delay incident will be assessed on its merit. The early warning process shall be used to communicate all delays. The Liquidated damages in the activity schedule shall be subject to a grace period of 7 days** | | | |
| **X13** | **Performance bond** |  |  |  |  |
| X13.1 | The amount of the performance bond is | **10% of the contract value, to be issued by the**  ***Contractor* 2 weeks after the kick-off meeting** | | | |
| **X16** | **Retention (not used with Option F)** |  | | | |
| X16.1 | The *retention free amount* is | **As per above** | | | |
|  | The *retention percentage* is | **10%**  **50% will be released 6 months after completion, another 50 % on completion of the defect period.** | | | |
| **X17** | **Low performance damages** |  |  |  |  |
| X17.1 | The amounts for low performance damages are: | **Amount** | **Performance level** | |  |
|  |
|  |  | **R 2,000 per day** | Compliance with Safety file/ plan requirements. (If not approved as per the Accepted Programme within 1 week from submission, it shall be deemed to be approved) | | |
|  |  | **R 2,000 per day** | Failure to revise the Programme as per the agreement. | | |
|  |  | **R 2,000 per day** | For every incident where a Quality Control Plan is not submitted in accordance with the schedule and delays the starting of that activity | | |
| **R 2,000 per day** | For every incident of quality non- compliance where Contractor fails to notify the Employer. And witness points on Quality Control Plan’s | | |
| **R 2,000 per day** | For every incident where reworks is done three times and more. | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  | The total low performance damages payable by the  Contractor does not exceed: |  | The total delay damages payable by the Contractor does not exceed 2% of the Contract Price |
| **X18** | **Limitation of liability** |  |  |
| X18.1 | The *Contractor*’s liability to the *Employer* for indirect or consequential loss is limited to: | **R0.0 (zero Rand)** | |
| X18.2 | For any one event, the *Contractor*’s liability to the *Employer* for loss of or damage to the *Employer*’s property is limited to: | **the amount of the deductibles relevant to the event not to exceed the total of the Prices** | |
| X18.3 | The *Contractor*’s liability for Defects due to his design which are not listed on the Defects Certificate is limited to | * **the total of the Prices at the Contract Date** | |
| X18.4 | The *Contractor*’s total liability to the *Employer* for all matters arising under or in connection with this contract, other than excluded matters, is limited to: | **the total of the Prices other than for the additional excluded matters.**  **The *Contractor’s* total liability for the additional excluded matters is not limited.**  **The additional excluded matters are amounts for which the *Contractor* is liable under this contract for**   * **Defects due to his design/Scope which arise before the Defects Certificate is issued,** * **Defects due to manufacture and fabrication outside the Site,** * **Loss of or damage to property (other than the *works*, Plant and Materials),** * **Death of or injury to a person and** | |
| X18.5 | The *end of liability date* is | 1. **1 year after the *defects date* for latent Defects and** 2. **the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.**   **A latent Defect is a Defect which would not have been discovered on reasonable inspection by the *Employer* or the *Supervisor*** | |

|  |  |  |
| --- | --- | --- |
|  |  | **before the *defects date*, without requiring any inspection not ordinarily carried out by the *Employer* or the *Supervisor* during that period. If the *Employer* or the *Supervisor* do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the *Employer* or the *Supervisor* to have discovered the Defect.** |
| **Z** | **The *Additional conditions of contract***  **are** |  |
|  | **Z1 to Z15 always apply.** |
| **Z1** | **Cession delegation and assignment** |  |
| Z1.1 | The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer.* | |
| Z1.2 | Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry. | |
| **Z3** | **Change of Broad Based Black Economic Empowerment (B-BBEE) status** | |
| Z3.1 | Where a change in the *Contractor’s* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor*’s B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change. | |
| Z3.2 | The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project Manager*. | |
| Z3.3 | Where, as a result, the *Contractor’s* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor*’s obligation to Provide the Works. | |
| Z3.4 | Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93. | |
|  |  |  |

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| **Z4** | **Confidentiality** |

|  |  |
| --- | --- |
| Z4.1 | The Receiving Party does not disclose or make any information arising from or in connection with this contract available to Others, without the prior written consent of the Disclosing Party, which is not unreasonably withheld. This undertaking does not apply to information which at the time of disclosure or thereafter, without default on the part of the Receiving Party, enters the public domain or to information which was already in the possession of the Receiving Party at the time of disclosure, or information independently developed without reference to the Disclosing Party’s information. Should the Contractor disclose information to Others in terms of clause 25.1, the Contractor ensures that the provisions of this clause are complied with by the recipient |
| Z4.2 | If the Receiving Party is uncertain about whether any such information is confidential, it is regarded as such until notified otherwise by the Disclosing Party. |
| Z4.3 | . In the event that the Receiving Party is required by law to disclose any such information which is required to be kept confidential, the Receiving Party, to the extent permitted by law prior to disclosure, notifies the Disclosing Party so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the Receiving Party may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed |
| Z4.4 | The Receiving Party ensures that all his Subcontractors abide by the undertakings in this clause |
| Z4.5 | . **Insert the following only where relevant:**  The taking of images (whether photographs, video footage or otherwise) of the works or any portion thereof, in the course of Providing the Services or after Completion, requires the prior written consent of the Employer. All rights in and to all such images vests in the Employer |
| **Z5** | **Waiver and estoppel: Add to core clause 12.3:** |
| Z5.1 | Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties*,* the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing. |
| **Z6** | **Health, safety and the environment: Add to core clause 27.4** |
| Z6.1 | The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:   * accepts that the *Employer* may appoint him as the “Principal Contractor” (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) (“the Construction Regulations”) for the Site; * warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and * undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the   *Contractor’s* direction and control, likewise observe and comply with the foregoing. |
| Z6.2 | The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the  *Contractor’s* direction and control, likewise observe and comply with the foregoing. |

|  |  |
| --- | --- |
| **Z7** | **Provision of a Tax Invoice and interest. Add to core clause 51** |
| Z7.1 | Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer*'s procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate. |
| Z7.2 | If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made. |
| Z7.3 | The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer*’s VAT number 4740101508 on each invoice he submits for payment. |
| **Z8** | **Notifying compensation events** |
| Z8.1 | Delete from the last sentence in core clause 61.3, “unless the *Project Manager* should have notified the event to the *Contractor* but did not”. |
| **Z9** | ***Employer’s* limitation of liability** |
| Z9.1 | The *Employer’s* liability to the *Contractor* for the *Contractor’s* indirect or consequential loss is limited to R0.00 (zero Rand) |
| Z9.2 | The *Contractor*’s entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the  *Employer*’s liability under the indemnity is limited. |
| **Z10** | **Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":** |
| Z10.1 | or had a business rescue order granted against it. |
| **Z11** | **not used** |

|  |  |  |
| --- | --- | --- |
| **Z12** | **Ethics** |  |
| For the purposes of this Z-clause, the following definitions apply: | | |
| **Affected Party** | | means, as the context requires, any party, irrespective of whether it is the *Contractor* or a third party, such party’s employees, agents, or Subcontractors or Subcontractor’s employees, or any one or more of all of these parties’ relatives or friends, |
| **Coercive Action** | | means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an  Affected Party to act unlawfully or illegally, |

|  |  |  |
| --- | --- | --- |
| **Collusive Action** |  | means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally, |
| **Committing Party** | | means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractor or the Subcontractor’s employees, |
| **Corrupt Action** | | means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party, |
| **Fraudulent Action** | | means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation, |
| **Obstructive Action** | | means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and |
| **Prohibited Action** |  | means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action. |
| Z12.1 | A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof. | |
| Z12.2 | The *Employer* may terminate the *Contractor*’s obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor*’s obligation to Provide the Services for this reason. | |
| Z12.3 | If the *Employer* terminates the *Contractor*’s obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2. | |
| Z12.4 | A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation. | |
| **Z13** | **Insurance** | |
| **Z 13.1** | **Replace core clause 84 with the following:** | |

|  |  |  |
| --- | --- | --- |
| **Insurance cover** | **84** |  |
|  | **84.1** | When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force. |
|  | **84.2** | The *Contractor* provides the insurances stated in the Insurance Table A. |
|  | **84.3** | The insurances provide cover for events which are at the *Contractor*’s risk from the *starting date* until the earlier of Completion and the date of the termination certificate. |
|  |  | **INSURANCE TABLE A**  Insurance against Minimum amount of cover or minim limit of indemnity |

|  |  |
| --- | --- |
| Loss of or damage to the *works*, Plant and Materials | The replacement cost where not covered by the *Employer*’s insurance  The *Employer*’s policy deductible, as at Contract Date, where covered by the *Employer*’s insurance |
| Loss of or damage to Equipment | The replacement cost |
| Liability for loss of or damage to property (except the *works*, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) caused by activity in connection with this contract | Loss of or damage to property  *Employer*’s property  The replacement cost where not covered by the *Employer*’s insurance  The *Employer*’s policy deductible, as at Contract Date, where covered by the *Employer*’s insurance  Other property  The replacement cost  Bodily injury to or death of a person The amount required by applicable law |
| Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract | The amount required by the applicable law |

**Z 13.2 Replace core clause 87 with the following:**

The *Employer* provides the insurances stated in the Insurance Table B.

##### INSURANCE TABLE B

|  |  |
| --- | --- |
| **Insurance against or name of policy** | **Minimum amount of cover or minimum of indemnity** |
| Assets All Risk | Per the insurance policy document |
| Contract Works insurance | Per the insurance policy document |
| Environmental Liability | Per the insurance policy document |
| General and Public Liability | Per the insurance policy document |
| Transportation (Marine) | Per the insurance policy document |
| Motor Fleet and Mobile Plant | Per the insurance policy document |
| Terrorism | Per the insurance policy document |
| Cyber Liability | Per the insurance policy document |
| Nuclear Material Damage and Business Interruption | Per the insurance policy document |
| Nuclear Material Damage Terrorism | Per the insurance policy document |

|  |  |  |  |
| --- | --- | --- | --- |
| **Z14** | | **not used** | |
| **Z15** | | **Asbestos** |  | |
| For the purposes of this Z-clause, the following definitions apply: | | | | |
| **AAIA** | |  | means approved asbestos inspection authority. | |
| **ACM** | |  | means asbestos containing materials. | |
| **AL** | |  | means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL. | |
| **Ambient Air** | | | means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet. | |
| **Compliance Monitoring** | | | means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard’s requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles. | |
| **OEL** | |  | means occupational exposure limit. | |
| **Parallel Measurements** | | | means measurements performed in parallel, yet separately, to existing measurements to verify validity of results. | |
| **Safe Levels** | | | means airborne asbestos exposure levels conforming to the Standard’s requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles. | |
| **Standard** | |  | means the *Employer*’s Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos | |
|  | Containing Material, Equipment and Articles. | | | |
| **SANAS** | means the South African National Accreditation System. | | | |
| **TWA** | means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA. | | | |
| Z15.1 | The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) (“Asbestos Regulations”). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM. | | | |
| Z15.2 | Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor*’s expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan. | | | |
| Z15.3 | The *Employer* manages asbestos and ACM according to the Standard. | | | |
| Z15.4 | In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe. | | | |
| Z15.5 | The *Contractor*’s personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable. | | | |
| Z15.6 | The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001. | | | |
| Z15.7 | Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer*’s expense, and  conducted in line with South African legislation. | | | |

**Z16 Employer’s right to review the contract**

Z16.2 The Employer reserves the right to terminate or modify the contract when a need arises or when there are changes requiring such in the organization. Such termination or modification will be subjected to reason for termination, procedure and accounts applicable to the NEC3 ECC core clause 9 termination.

Z17 Intellectual property rights

Z17.1 “Intellectual Property” means all copyrights, trademarks, trade secrets, patents, utility models and other intellectual property rights recognized in any jurisdiction worldwide, including all applications and registrations.

Z17.2 No right, title or interest in Intellectual Property provided by Contractor is transferred to Employer under the Agreement, including Intellectual Property existing prior to, or created independently of, the performance of the Agreement. All Intellectual Property and results of Services, including software, models, designs, drawings, documents, inventions, and know-how (“Inventions”), conceived or developed by Contractor in connection with the Agreement, are the sole property of Contractor and Employer assigns any rights it may have in such Inventions to Contractor. Employer has no right or license to Intellectual Property or Inventions provided by Contractor, except as granted in the Agreement.

Z17.3 Contractor and its suppliers retain all right, title and interest to all Software, and all modifications and enhancements thereof, and no right, title, or interest in the Software, or any copies thereof, is transferred to Employer. Employer will hold all Software supplied by Contractor in strict confidence and will use best efforts not to disclose Software to others. All Software delivered by Contractor is subject to a software license or software subscription agreement (“License”). If Employer does not agree to a License with Contractor, Employer does not have a license or right to Software.

Z17.4 Employer retains all rights that Employer already holds in data and other information that Employer or persons acting on Employer´s behalf input, upload, transfer or make accessible in relation to, or which is collected from Employer or third party devices or equipment by, the Deliverables (“Input Data”).

Z17.5 The Contractor shall grant the Employer a non-exclusive, non-transferable, fully paid-up and royalty-free licence to use the Contract Intellectual Property strictly as may be required by the Employer and its wholly owned subsidiaries for the purpose of to use the Works.

Z17.6 Contractor and its Affiliates have the right to retain, transfer, disclose, duplicate, analyze, modify and otherwise use Input Data to provide, protect, improve or develop Contractor’s products or services. Contractor and its Affiliates may also use Input Data for any other purpose provided it is in an anonymized form that does not identify Employer. Any Employer Personal Data contained within Input Data shall only be used or processed in accordance with the data privacy terms of this Agreement and applicable law. All information, analysis, insights, inventions and algorithms derived from Input Data by Contractor and/or its Affiliates (but excluding Input Data itself) and any intellectual property rights related thereto, are owned exclusively and solely by Contractor and are Contractor´s confidential information. This section survives termination of this Agreement.

Z17.7 Contractor will defend any suit against Employer claiming that a Deliverable infringes a valid United States and South Africa patent or copyright existing as of the Agreement effective date and will indemnify Employer for any final judgment against Employer resulting from the suit provided Employer: (a) gives Contractor prompt notice when Employer becomes aware of a third-party claim, (b) gives complete authority and assistance (at Contractor's expense) for disposition of the claim, and (c) makes no prejudicial admission about the claim.

Z17.8 Contractor has no liability, and Employer will indemnify Contractor for claims related to: (a) Deliverables supplied per Employer designs, drawings or specifications that were not supplied by the Contractor, (b) Deliverables used other than for the purpose for which they were delivered, (c) combining a Deliverable with a product or software not supplied by Contractor, (d) modification of a Deliverable by anyone other than Contractor, (e) compromise or settlement made without written Contractor consent, or (f) Employer’s failure to install updates, upgrades, error corrections, changes, or revisions provided by Contractor. Contractor has no liability for Employer’s costs or attorney fees.

Z17.9 If an infringement claim is made or is likely, Contractor may at its option and expense: (a) procure the right for Employer to continue using the Deliverable, (b) modify the Deliverable to be non-infringing, or (c) accept return of the Deliverable (and terminate Employer’s applicable software license) and credit Employer the purchase price paid for the Deliverable, less reasonable depreciation for use, damage and obsolescence. Failure of Employer to accept any of the above remedies in lieu of the infringing Deliverable relieves Contractor of any liability for infringement. Failure to ship original Deliverables deemed infringing will not be a breach to the Agreement.

Z17.10 THIS SECTION STATES CONTRACTOR’S ENTIRE LIABILITY AND EMPLOYER’S SOLE RECOURSE AND EXCLUSIVE REMEDIES WITH RESPECT TO INFRINGEMENT

Z18 Data Privacy

The Parties agree to comply with the Protection of Personal Information Act 4 of 2013

Z19 Cybersecurity

Any Cyber Security offering shall be governed by the Contractor Cyber Security terms attached hereto.

Z20 End User License Agreement

Any Software offering shall be governed by the End User License Agreement attached hereto

Z21 Products

The products being offered are available at the time of submission and in line with our programme, however, should there be a delay of the project caused by Employer, the Contractor shall advise the Employer of any upgrades to the Product. Should the Employer wish to upgrade then any cost associated thereto shall be for the Employer and the change order process shall be followed.

Z23 Aggregate Liability for penalties

Total aggregate liability for clauses X7 and X17 shall be limited to 7% of the Contract Price and later amended or   
 modified if applicable

Z25 SD&L

The Contractor shall offer a bond in lieu of retention of monies

Z26 Sanctions

The Parties agree to comply with Sanctions Laws in relation to this Agreement. Employer will not sell, export, re-export, divert, or otherwise transfer, any Contractor products, technology, software, or proprietary information: (i) to or for any Sanctioned Persons or Sanctioned Jurisdictions; or (ii) for purposes prohibited by any Sanctions Laws.

* The Parties acknowledge and accept that as at date of execution of the contract, the Employer is a member of BRICS of which Russia is also a member. The Parties commit to conduct regular due diligences independently from one another to ensure that the scope of services / works is executed in a manner that does not affect their respective obligations to comply with Sanctions laws related to the execution of this contract.
* Either Party may terminate its obligation under this contract if the fulfilment of its obligation is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes or other sanctions, without additional costs
* Sanctions Laws – rules, laws, regulations, restrictions and/or requirements set forth from the United Nations, the United States, the European Union and its Member States, the United Kingdom, Switzerland, and any other applicable jurisdictions (“Sanctions Laws”).

Z27 Eskom reserves a right to move the works to another Contracted Service Provider in case of incapacity or delays from the Service Prover.

Z28. Please ensure Intumescent Paint is applied below the IBR roof after applying SPF.

C1.2 Contract Data

**Part two - Data provided by the *Contractor***

##### Notes to a tendering contractor:

* 1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)2 in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 156 to 158 of the ECC3 (April 2013) Guidance Notes.
  2. The number of the clause which requires the data is shown in the left-hand column for each statement however other clauses may also use the same data
  3. Where a form field like this [ ] appears, data is required to be inserted relevant to the option selected. Click on the form field ***once*** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

|  |  |  |
| --- | --- | --- |
| **Clause** | **Statement** | **Data** |
| 10.1 | The *Contractor* is (Name): |  |
| Address |
| Tel No. |
| Fax No. |
| 11.2(8) | The *direct fee percentage* is |  |
| The *subcontracted fee percentage* is |  |
| 11.2(18) | The *working areas* are the Site and |  |
| 24.1 | The *Contractor's* key persons are: | **CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .** |
| 1 Name: |
| Job: |
| Responsibilities: |
| Qualifications: |
| Experience: |
| 2 Name: |
| Job |
| Responsibilities: |
| Qualifications: |
| Experience: |

2 Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see [www.ecs.co.za](http://www.ecs.co.za/)

|  |  |  |
| --- | --- | --- |
| 11.2(3) | The *completion date* for the whole of the  *works* is |  |
| 11.2(14) | The following matters will be included in the Risk Register |  |
| 11.2(19) | The Works Information for the *Contractor*’s design is in: |  |
| 31.1 | The programme identified in the Contract Data is |  |
| **B** | **Priced contract with bill of quantities** |  |
| **A** | **Priced contract with activity schedule** | As per price schedule  **(in figures)**  **(in words), excluding VAT** |
| 11.2(20) | The *activity schedule* is in |
| 11.2(30) | The tendered total of the Prices is |
|  |  |
|  | **Data for Schedules of Cost Components** | *Note “SCC” means Schedule of Cost Components starting on page 60, and “SSCC” means Shorter Schedule of Cost Components starting on page 63 of ECC3 (April 2013).* |
| **A** | **Priced contract with activity schedule** | **Data for the Shorter Schedule of Cost Components** |

# PART 2: PRICING DATA

## ECC3 Option A

|  |  |  |
| --- | --- | --- |
| **Document reference** | **Title** | **No of pages** |
| C2.1 | Pricing assumptions: Option A |  |
| C2.2 | The *activity schedule* |

* C2.1 Pricing assumptions: Option A

### How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, (ECC3) Option A states:

|  |  |  |
| --- | --- | --- |
| **Identified and defined terms** | 11  11.2 | (20) The Activity Schedule is the *activity schedule* unless later changed in accordance with this contract. |
|  |  | (27) The Price for Work Done to Date is the total of the Prices for  each group of completed activities and  each completed activity which is not in a group.  A completed activity is one which is without Defects which would either delay or be covered by immediately following work. |
|  |  | (30) The Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract. |

This confirms that Option A is a lump sum form of contract where the work is broken down into activities, each of which is priced by the tendering contractor as a lump sum. Only completed activities are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date.

### Function of the Activity Schedule

Clause 54.1 in Option A states: “Information in the Activity Schedule is not Works Information or Site Information”. This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Activity Schedule but in the Works Information. This is further confirmed by Clause 20.1 which states, “The *Contractor* Provides the Works in accordance with the Works Information”. Hence the *Contractor* does **not** Provide the Works in accordance with the Activity Schedule. The Activity Schedule is only a pricing document.

### Link to the programme

Clause 31.4 states that “The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance”. Ideally the tendering contractor will develop a high level programme first then resource each activity and thus arrive at the lump sum price for that activity both of which can be entered into the *activity schedule*.

**Preparing the *activity schedule***

Generally it is the tendering contractor who prepares the *activity schedule* by breaking down the work described within the Works Information into suitable activities which can be well defined, shown on a programme and priced as a lump sum.

The *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in his *activity schedule* and be priced accordingly.

It is assumed that in preparing his *activity schedule* the *Contractor:*

* Has taken account of the guidance given in the ECC3 Guidance Notes pages 19 and 20;
* Understands the function of the Activity Schedule and how work is priced and paid for;
* Is aware of the need to link the Activity Schedule to activities shown on his programme;
* Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer’s* risk;
* Has priced work he decides not to show as a separate activity within the Prices of other listed activities in order to fulfil the obligation to complete the *works* for the tendered total of the Prices.
* Understands there is no adjustment to the lump sum Activity Schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event.

C2.2 the *activity schedule*

**Activity Schedule**

Cost breakdown

Payment will be done on a rate per houses basis, as such payment for work done by the contractor will be based on signed assessment certificate given by the homeowner in addition with other supporting documents.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item | Description | unit | Quantity | Rate | Total Price |
| 1 |  |  |  |  |  |
| 1.1 | Insulation (SPF; Intumescent paint; Ceiling; Painting) | Sum |  |  |  |
| 1.2 | Supply of Hybrid stoves with gas cylinders | Sum |  |  |  |
| 1.3 | Supply of 3-panel gas heaters with cylinders | Sum |  |  |  |
| 1.4 | Once off filling of Cylinders | sum |  |  |  |
|  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | unit | Quantity | Rate | Total Price |
| 2 |  |  |  |  |  |
| 2.1 | Project Manager | Sum |  |  |  |
| 2.2 | SHEQ Officer | Sum |  |  |  |
| 2.3 | Community Liaison Officer | Sum |  |  |  |
| 2.4 | Profecient all-incompasing PM services | sum |  |  |  |
|  |  |  |  |  |  |

The table below indicate the as and when required cost for the special houses that will be identified.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Description | Unit | Quantity | Rate | Total Price |
| 3 |  |  |  |  |  |
| 3.1 | Roof Repairs | M2 |  |  |  |
| 3.2 | Draught proofing | M2 |  |  |  |
| 3.3 | Asbestos removal -Dismantling; containment; haulage to the Vaal | M2 |  |  |  |
| 3.4 | Covid compliance | sum |  |  |  |
|  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Description** | **Unit** | **Quantity** | **Rate** | **Total Price** |
| 4 |  |  |  |  |  |
| 4.1 | Preliminaries and General - Overheads; Logistics; Tools; PPE; transport from port; etc | sum |  |  |  |
|  |  |  |  |  |  |

# PART 3: SCOPE OF WORK

|  |  |  |
| --- | --- | --- |
| **Document reference** | **Title** | **No of pages** |
|  | This cover page | 1 |
| C3.1 | *Employer*’s Works Information |
| C3.2 | *Contractor*’s Works Information |
|  | Total number of pages |  |

# C3.1: EMPLOYER’S WORKS INFORMATION

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# Description of the *works*

## Executive overview

New emission legislation as instructed by the Department of Forestry, Fisheries and Environmental (DFFE) to the Employer’s Power Stations (Air Quality Act, 2004 [Act 39/2004], Notice 248; 31 March 2010: Minimum Emission Standards) states that all operating plant shall conform to the new plant particulate emission limit of 50 mg/Nm3 by 2020.

Eskom is now embarking on the implementation of phase 2 on the roll-out of Air quality offset intervention, focussing on reducing household emissions in areas classified in the clusters outlined in the table 1 below.

**Table 1: Cluster Allocation for Insulation and Draught Proofing**

|  |  |  |  |
| --- | --- | --- | --- |
| Cluster | Intervention Areas | Linked Stations | No of Households |
| A | Phola, Emalahleni & Masakhane | Kendal & Duvha | 9 181 |
| B | Emzinoni plus & Thubelihle | Matla & Kriel | 7 287 |
| C | Silobela, New Ermelo & Nederland | Arnot & Camden | 5 099 |
| D | Sivukile, Nthorwane & Refengkotso | Tutuka, Grootvlei & Lethabo | 3 670 |
| Total | | | **25 237** |

The project addresses Eskom’s strategic imperative of reducing the organization’s environmental footprint and pursuing low-carbon growth opportunities. The aim is to reduce household emissions in the communities by swapping wood/coal burning stoves with a hybrid domestic cooking stove. In addition, the project aims to implement proposed alterations to these houses is to make the building thermally comfortable which will save cost of keeping the interior warm in winter and cool in summer thereby reducing household emissions.

**The Scope is for the Supply and deliver of three (3) LPG plates and one (1) Electric plate hybrid cooking stoves, LPG Heaters with 9KG LPG Cylinders x 2 and Supply, deliver and install ceiling insulation (SPF and Ceiling boards), electrical re-wiring ,Supply of CFL and asbestos removal and disposal for Air Quality Offset Project on and “as and when required basis” for Various Sites in Mpumalanga and Free State (Emzinoni Plus (3440, 36 Months), Thubelihle (2390,36 Months), Silobela (2003 , 36 Months), Masakhane (886, 12 Months) and Free State Refengkgotso ( 500, 12 Months).**

* + 1. **General.**

The Scope is for the Supply and deliver of three (3) LPG plates and one (1) Electric plate hybrid cooking stoves, LPG Heaters with 9KG LPG Cylinders x 2 and Supply, deliver and install ceiling insulation (SPF and Ceiling boards), electrical re-wiring ,Supply of CFL and asbestos removal and disposal for Air Quality Offset Project on and “as and when required basis” for Various Sites in Mpumalanga and Free State (Emzinoni Plus (3440, 36 Months), Thubelihle (2390,36 Months), Silobela (2003 , 36 Months), Masakhane (886, 12 Months) and Free State Refengkgotso ( 500, 12 Months).

The *Employer’*s objective is to perform thermal retrofit in the selected houses to improve thermal comfort for the household and thereby reducing household emissions.

The *Contractor* is responsible for the procurement, supply and installation/construction of the *works* indicated herein. This includes

* Set up a project office local to site with adequate security (central to area of implementation, i.e same township)
* Provide a warehouse and ensure stock received is safe and secured at all times (As per warehouse specification to be provided by *Employer*). Provide the required insurance for the appliance stock in storage and ensure there is insurance cover for stock in transit from warehouse to the households for the entire duration of the contract.
* Setup an area in the warehouse specifically for inspection and testing (functionality) of the Gas-Electric (Hybrid) stoves and heaters supplied by the manufacturer prior to installation. The inspection of the delivered appliances is done within a week after delivery by the manufacturer. The results of the test shall be reported to the *Employer*
* Ensure that the eligible participating households are measured and BOQ prepared for installation. The *Employer* to provide the database of household that are participating.
* Prepares the house for insulation by covering and moving furniture before work commence and also returns furniture and cleaning up site after completion of the work. The *Contractor* to note the removal and return of furniture should be done in one day so not to inconvenience the households.
* Ensure the removal of old stoves, incandescent lamps, corrugated steel roofing sheets and associated stoves accessories (i.e chimney etc) from the household to where they will be temporarily stored before being recycled. The storage of the old coal stoves may be kept up to a month depending on the installation rate.
* Supply/procurement, delivery, off-loading and perform final inspection at the Settlements, temporary structures/ scaffolding, installation of hybrid domestic cooking stove (3 LPG and 1 Electric plate) and Hybrid heaters( LPG and Electric heater) each with associated 9kg LPG (liquid petroleum gas) cylinder per household, finishing complete in every detail and final certification.
* Supply/procurement, delivery, off-loading and performs final inspection at the Settlements, temporary structures/ scaffolding, erection/ construction, installation of ceiling insulation system (SPF and Ceiling boards) and required final painting, and electrical re-wiring, finishing complete in every detail and final certification.
* Removal of incandescent lamps and replace with new CFLs within the households.
* Any damages incurred during transit must be managed through the appropriate transit insurance by the *Contractor.*
* Ensure recycling of the old stoves, incandescent lamps corrugated steel roofing sheets and associated stove accessories (i.e. chimney) at an Eskom approved facility in an environmentally responsible manner.
* Acquire a licenced recycling company with all necessary permits or licences to recycle the old coal stoves, incandescent lamps, corrugated steel roofing sheets and associated stove accessories (i.e chimney etc) and provide documentation (This will form part of the tender returnable by the *Contractor*)
* Full removal of the asbestos roofs that should then be replaced with corrugated roofing in households that have asbestos roofing.

The *Contractor* takes full professional accountabilities for all the works as per the scope contained herein.

The C*ontractor* takes design liability for the insulation ceiling system to be installed in the different house and the insulation ceiling system must be fire tested as per the scope contained herein. The *Contractor* may not commence with any of the works until a successful fire test is conducted and the insulation ceiling system is deemed “acceptable for use” by the relevant authority/body

.

Any discrepancy or ambiguity between the Employer’s scope of work is immediately brought to the attention of the Project Manager for clarification.

The Contractor repairs all damage caused to existing infrastructure resulting from the works.

The Contractor submits ALL reports, documents, drawings (detailed, fabrication, etc) and certifications to the Project Manager for record keeping, both in soft and hard copy formats.

The Contractor takes note that review and acceptance of any document or drawing by the *Employer* in no way relieves the *Contractor* of his liability for the works. The *Contractor* remains liable for all works conducted as per this scope.

The *Contractor* ensures that the households understand the terms and conditions of the contract to be entered with them and that there will be surveys conducted.

The *Employer* reserves the right to terminate the contract at any time in line with the contract if the estimates for the houses are not reachable/cost effective or the environmental condition changes in such a way that there in no need for such a service anymore.

**3.2 Proposed layout**

The *Contractor* is issued the google site layout drawing for each settlement which depicts the co-ordinated locations of the various communities that have been identified for each cluster.

**3.3 RISK OF ASBESTOS**

The *Contractor* is made aware of the possibility of certain household having asbestos roofing. The contractor is required to have a resource or a contractor that is competent in asbestos Roofing safe handling, removal and disposal as per South African environmental requirements and regulation on handling Asbestos material.

**3.4 Codes & Standards to be used in the Works**

The *Contractor* adheres to the latest edition of all applicable SANS standards, Eskom standards and other codes of practice, regulations & standards. This includes but is not limited to:

1. SANS 10400 (all parts)
2. SANS 1539, Appliances operating on liquefied petroleum gas (LPG) or natural gas (NG) - Safety aspects.
3. SANS 1156-2, Hose for natural gas and liquefied petroleum gas (LPG) Part 2: Hose and tubing for use in natural gas and liquefied petroleum gas vapour phase.
4. SANS 1237, Single-stage regulators for liquefied petroleum gas (LPG).
5. SANS 10019, Transportable pressure receptacles for compressed, dissolved and liquefied gases — Basic design, manufacture, use and maintenance.
6. SANS 199, Shut-off valves for transportable, refillable liquefied petroleum gas cylinders

**3.5 Insulation (SPF and Ceiling boards) AND ELECTRICAL rewiring**

**3.5.1 General Requirements**

The average household at identified communities is to be regarded as 60m2 as maximum. This average household measurement is to be used to propose cost/pricing of delivering a full insulation and rewiring of household.

The *Contractor* is responsible for taking actual measurement of houses as per signed work instruction(s) from the project manager and in line with the database list of household participants. The estimates after measurement will be the final amount to be used for payment. The *Contractor* is responsible for preparing the BOQ for actual cost per household and submits this to the project Manager for approval before continuing with other activities of the work. The *Contractor* is responsible to ensure that each house has been sanitized before any work can proceed.

The *Contractor* shall identify households with asbestos roofing as well as those that require draught proofing as well as roof repairs. The cost for asbestos removal and disposal thereof and the cost associated with draught proofing and roof repairs shall be included and clearly marked as “adhoc” activity in the BOQ for actual cost that will be submitted to the project manager for approval. The households with Asbestos Roofing will require total roof replacement. Where draught proofing is not possible, the contractor is to replace broken windowpanes and doors with significant gaps, this cost is to be also clearly indicated on the BOQ for actual cost.

**3.5.2 Architectural design construction and finishes.**

The purpose of the proposed alterations to these household is to make the building thermally comfortable which will save cost of keeping the interior warm in winter and cool in summer. All new architectural works to be done is to comply with all parts of SANS 10400.

Construction and architectural finishes:

**3.5.3 Roof Structure**

The *Contractor* is responsible for removing the coal stove, the chimney and close off the roof before insulation and other related activities can proceed.

In existing IBR roof sheeting the C*ontractor* is to prepare, remove dust and repair any defect that causes leaks to existing roof and timber/metal rafters. The houses with Asbestos Roofing will require total roof replacement.

All metal roof sheeting is required to be the "IBR" type profile. The sheets are laid down, fastened and sealed in strict accordance with the manufacturer’s specifications.

The C*ontractor* is responsible to apply spray paint polyurethane foam (SPF) on the inside of the roof according to specialist’s directions/manufacturer’s instructions. This is to be 20-30mm thick and as per requirements for the application of the SPF Foam.

The C*ontractor* is to apply the SPF with an electronically governed spraying rig to ensure accurate mixing rates and provide cut-out in case of anomalies. In addition to spraying SPF, the contractor shall apply a rated waterborne intumescent paint coating to SPF by airless spraying.

**3.5.4 Ceiling**

The contractor shall supply/procurement, delivery, off-loading and performs final inspection, temporary structures/ scaffolding, erect/construct and instal a 6.4 mm thick Gypsum ceiling board with an R value of 2 or above. The ceiling board system shall be nailed to steel brandering at maximum 400mm c/c which are affixed to the ceiling joist or roof purloins directly under and to follow the pitch of roof which ever is applicable. The *Contractor* supplies the nails and other accessories required for the ceiling board system.

The *Contractor* shall the prime ceiling with plaster primer and 2 finishing coats of PVA fire resistant paint as per the manufacturer’s instructions. Finishing strips/cornices 76mm coved cornice should be fixed to ceiling boards (and not to walls).

The ceiling must perform adequately in terms of fire propagation properties according to the SANS 428 protocol, using the test specifications as contained in SANS 10177-10:2007 SOUTH AFRICAN NATIONAL STANDARD. Fire testing of materials, components and elements used in buildings. Part 10: Surface burning characteristics of building materials using the inverted channel tunnel test.

Paint color – crisp white

All electrical rewiring is to be done before installation of ceiling board.

The C*ontractor* takes design liability for the insulation ceiling system installed. Thus, the *Contractor*’s insulation system must be fire tested and deemed acceptable for use by competent body/authority.

The *Contractor* may not commence with any of the works until a successful fire test is conducted.

**3.5.4. Draught proofing**

The *Contractor* provides permanent ventilation in all rooms where permanent ventilation is required in accordance with SANS 1539. The *Contractor* uses a heater heat input of at least 4.5 kW when determining the need for permanent ventilation and assumes that the heater can be used in the same room as the hybrid stove.

The *Contractor* replaces broken windowpanes and doors with significant gaps where proofing is not possible.

The *Contractor* shall do plastering in and around the beam filling area on houses with significant gaps on the brickwork laid between the lower sides of the roof trusses up to the roof covering.

It is the responsibility of the *Contractor* to identify houses that requires draught proofing. The *Contractor* submits the required house information, material, and pricing to the Project Manager prior to implementation for approval.

**3.6 ELECTRICAL WIRING**

**3.6.1 General Requirements**

The Scope of work includes supply, install, commission, and provide a certificated of compliance of a specific building in compliance with the requirements of SANS 10142-1, SANS 10400XA and SANS 204.

The *Contractor* remains liable to hand over a complete and functioning electrical installation system for a specific building as per the requirements of SANS 10142-1.

The *Contractor* provides all tools, equipment and personnel required to execute and implement the Scope of Works.

The *Contractor* remains liable for all works conducted as per the requirements of the Scope of Works.

The *Contractor* submits a fully detailed Method Statement and Quality Control Plan (QCP) to the *Employer* in two weeks’ time prior commencing of work, for review and acceptance.

Any discrepancy or ambiguity between the *Employer’s* Scope of Works is immediately brought to the attention of the *Employer* for clarification.

The *Contractor* submits Certificate of Compliance (CoC) after commissioning the installation in compliance with the SANS 10142-1.

The *Employer* standardised material list which the contractor is to provide and utilised for installation is outlined in the table below.

It is the responsibility of the *Contractor* to identify houses that require additional material over and above what is provided for on the standardised material list. The *Contractor* submits the required house information, material and pricing to the Project Manager prior to implementation for approval.

Table 1 : Standardised Material List per Household

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Description | Unit | Quantity |
|  |  |  |  |
| 1 | DB Board 8 MOD Flush, Including circuit Breakers | No. | 1 |
| 2 | Well E/GALV 100x50 | No. | 5 |
| 3 | Conduit Pipe 20mm | No. | 28 |
| 4 | PVC Saddles 20mmx10 | No. | 15 |
| 5 | PVC Coupling 20mm Pack x10 | No. | 5 |
| 6 | PVC Adaptors Mae Pack x10 | No. | 5 |
| 7 | Elec 11 Switch Complete | No. | 5 |
| 8 | Elec Single plug complate | No. | 5 |
| 9 | Insulation tape 19mm | No. | 3 |
| 10 | PVC Box 3 way top entry | No. | 3 |
| 11 | PVC box 4 way top entry | No. | 7 |
| 12 | Surfix 1.5mm | m | 80 |
| 13 | Surfix 2.5mm | m | 60 |
| 14 | light Complate with Fittings | No. | 5 |

**3.6.2 Wiring design construction and finishes.**

**Distribution Board**

The *Contractor* provides, installs, tests and commissions sufficient distribution board for a specific installation in compliance with the requirements of SANS 10142-1.

A distribution board needs to be functioning and acceptable, it is the *Contractor’s* responsibility to conduct an inspection and test (QCP to be compiled, accepted and applied) before delivery to site.

**Lighting Fittings**

The *Contractor* determines,provides, installs, tests and commissions sufficient lighting for a specific installation in compliance with the requirements of SANS 10142-1, SANS 10400XA and SANS 204.

It is the *Contractor’s* responsibility to ensure that the Lux level inside all the rooms of the houses is of acceptable level.

**Wiring**

The *Contractor* determines,provides, installs, tests and terminates (both ends) a sufficient wiring cable for a specific installation in compliance with the requirements of SANS 10142-1.

Wiring shall be carried out in PVC conduit. All conduits shall be clear of moisture and debris before any wiring is commenced.

**Socket Outlet**

The *Contractor* determines,provides, installs, wires and tests a sufficient socket outlet for a specific installation in compliance with the requirements of SANS 10142-1.

**Switch**

The *Contractor* determines,provides, installs, wires and tests a sufficient switch for a specific installation in compliance with the requirements of SANS 10142-1.

**Certificate of Compliance**

The *Contractor’s* competent person shall perform illumination measurements (as recommended in SANS 10114 -1) and submitted illumination measurement reports to the *Employer*. Measurements shall be performed once the installation has been completed.

On completion of the installation, The *Contractor* issued an Electrical Certificate of Compliance (CoC) to the *Employer* in terms of the Occupational Health and Safety Act, (OHS Act 85 of 1993).

**3.7 Hybrid heaters and hybrid Stoves with associated 9kg LPG cylinders**

**3.7.1 General Requirements**

Each gas appliance is provided with a dedicated pressure regulator and flexible hose.

The Contractor submit compliance certificates for the following:

* Roll-about heater compliance to SANS 1539;
* Hybrid stove compliance to SANS 1539
* Pressure regulator compliance to SANS 1237
* Flexible hose compliance to SANS 1156-2
* Gas cylinder compliance to SANS 10019
* Gas cylinder shut off valve to SANS 199
* Hybrid stove to VC 8055 from the National Regulator of Compulsory Specifications (NRCS)

**3.7.2 Hybrid (gas and electrical) Roll-about heaters**

Requirements:

* Comply to SANS 1539.
* Suitable for use with 9kg LPG cylinder.
* Heat input between 4 kW and 4.5 kW
* Three (3) Ceramic Panels
* Three (3) different heat settings.
* Fitted with built in manual ignition device.
* Fitted with bullnose and other accessories
* Flame failure protection mechanism during operation.
* Flame cut-out when the heater is tilted.
* Standard dimension electrical heater with maximum output rating not exceeding 2 kW.
* Electrical functions compatible to the South African electrical network (50Hz and 230V).
* Plug-in cable compatible to South African electrical plugs.
* Regulator complying to SANS 1237
* Flexible hose complying to SANS 1156-2.
* Dimensions
  + Total height (Ht) not exceeding 800 mm,
  + Width (W) not exceeding 500 mm,
  + Depth (D) not exceeding 450 mm.

**3.7.3 Hybrid Stoves**

Requirements:

* Comply to SANS 1539.
* Comply to VC 8055 from the National Regulator of Compulsory Specifications (NRCS)
* Suitable for use with standalone 9kg LPG cylinder.
* Fitted with 3 gas burners and one electrical plate with independent variable temperature control knobs for the gas burners and electrical plate.
* Integrated electrical oven with its variable control knobs (i.e. Grill and Bake functions)
* Storage/Utility compartment.
* Large standard dimension electrical plate, solid or spiral continuous top, with maximum output rating not exceeding 2 kW.
* Electrical functions compatible to the South African electrical network (50Hz and 230V).
* Plug-in cable compatible to South African electrical plugs.
* Electronic Burner Ignition
* Fitted with bullnose and other accessories
* The maximum operating temperature of the integrated oven does not exceed 250oC, with grill and bake functionalities as standard.
* Purchase details for future reference written on the stove i.e. – Serial Number.
* Regulator complying to SANS 1237
* Flexible hose complying to SANS 1156-2.
* The stove with an integrated oven dimensions are as follows:
  + Total height (Ht) not exceeding 1200 mm,
  + Floor to cooking level height (Hfc) not exceeding 950 mm,
  + Width (W) not exceeding 500 mm and,
  + Depth (D) not exceeding 650 mm.
  + Electrical plate’s diameter (d) to be large standard dimension
  + The LPG plates’ diameter (d) to be a combination of large and small standard dimensions.
  + The integrated oven volume not smaller than 57 Litres.

**3.7.4 9KG LPG CYLINDER**

The Contractor supplies one 9 kg LPG cylinder for each stove and one 9 kg LPG cylinder for each heater. The *Contractor* is responsible for the first fill of the cylinders.

The LPG cylinders are to be accepted for exchangeable at a minimum of two local LPG retailers. The cylinder complies with SANS 10019. The *Contractor* provides written proof of exchangeability and the details for the local LPG retailers.

**3.8 Transactional and After Service Specifications**

The *Employer* requires an unconditional product guarantee against latent defects inclusive to all parts (Gas and Electrical) for a period of 12 months.

*Employer* accepts no failure for the first year of operation. Should there be any failures within the first twelve (12) months of delivery; the *Contractor* is liable to replace all failure products with new working products at own costs.

The *Contractor* shall provide a written commitment to train 10 (ten) personnel, specified by Eskom. The trainers shall have relevant experience and be competent to provide the training.

As part of after-sale support, the *Contractor* shall provide technical support as follows for the entire warranty period of 12 months:

* Telephonic support within 24 hours after a reported fault/failure
* Based on the outcome of the telephonic support if call out support is required the Supplier needs to give on-site support within 48 hours from the reported fault.
* The *Contractor* shall indicate the lead time on all spares, with a maximum of 48 hours.
* If, within the first six months of the guarantee period, 20 % or more of any class of installed equipment fails, the *Employer* may, at their sole discretion, have the right to demand the replacement of all that class of component or materials for the entire set of unit installations at the cost of the Supplier.

**3.9 User manuals (User Instructions)**

The following topics are covered in the user manuals:

* Safety Instruction,
* Installation Instruction,
* Operation Instruction,
* Maintenance,
* List of required spares/parts and
* Warranty.

Manuals to be submitted in both hardcopy and Electronic copy and written in English.

Manuals must be included in the tender submission.

**3.10 Deliverables/ submissions by the contractor**

The *Contractor* is responsible for the following deliverables. The *Contractor* is to note that all documents are submitted to the *Project Manager* for review and acceptance prior to implementation. This includes:

1. Fire Test
2. Data Base
3. Product Technical Specification for stove and heater
4. Installation/ Construction Quality Plan;
5. Electrical Design Drawings
6. Electrical COC
7. Gas COC
8. Asbestos Disposal Permit

Certification is done in accordance with SANS 10400.

All deliverables are to be submitted in both hard and soft copy (USB/CD) formats. All documents are to be in searchable PDF.

## Management and start up.

### Management meetings

Regular meetings of a general nature may be convened and chaired by the *Project Manager* as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| Title or purpose | Approximate time or interval | Location | Attendance by: |
| Kick-off meeting | Within two weeks of contract start | Eskom Megawatt Boardroom or Virtual meeting | Employer’s and Contractor’s Project/Contract and Site Managers |
| Overall contract progress and feedback | Weekly | Eskom Megawatt Boardroom or Virtual meeting | Employer’s and Contractor’s Project/Contract and Site Managers |
| Risk Register and compensation events | Monthly | Eskom Megawatt Boardroom /Site or Virtual meeting | Employer’s and Contractor’s Project/Contract and Site Managers |
| Contractor’s Safety meeting | Monthly (While on site) | Site or Virtual meeting | Employer’s and Contractor’s Project/Contract and Site Managers and Contractor’s Safety Officer |
| Quality and NCR/ Defect meeting | Monthly | Site or Virtual meeting | Employer’s and Contractor’s Project/Contract and Site Managers and/ or  Contractor’s Safety Officer and/or Quality Officer |
| Assessment meetings | On or before 25th of the month. | Site or Virtual meeting | Employer’s and Contractor’s Project/Contract and Site Managers |

* + 1. Meetings of a specialist nature may be convened as specified elsewhere in this Works Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *works*. Records of these meetings shall be submitted to the *Project Manager* by the person convening the meeting within five days of the meeting.
    2. All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.
    3. The *Contractor* arranges and holds all necessary meetings with his employees including daily toolbox talks, pre-job and post-job briefings, health and safety and risk assessment meetings etc.

### Documentation control

##### General

* + - 1. The Contractor submits all documentation to the Project Manager and the Project Manager to the Contractor’s Project/Contract Manager.
      2. Electronic contract communication is restricted to electronic mail only.
      3. All communications are filed and kept on Site. These communication documents are to adhere to the ECC 3 communication requirements.
      4. For contractual issues, standard NEC templates and forms are used by both parties or if unavailable, the Employer’s templates and forms are used e.g. Non Conformance Reports, Pre-commissioning checks or Assessment Certificates. Alternatively, the Contractor prepares appropriate documentation to meet the Employer’s requirements.
      5. The Contractor submits all commercial documentation as specified in the Invitation to Tender document, as well as all documentation as specified by the SHEQ requirements.
      6. The Contractor submits a project specific site team organogram indicating all its employees that will form part of the site team relevant to the project. The numbers, designations and names of all employees must be clearly indicated. Names are not required for positions, which will be filled as part of local hire and subcontracting. This will be the Contractor’s Permanent Core Team. All additional recruits, which are not part of the Contractor’s Permanent Core Team, will be recruited as per the process set out in 4.1.2.1, Recruitment of General, Semi-Skilled, and Skilled Labour.
      7. The Contractor submits a preliminary detailed project programme, in Microsoft Projects format that indicates all activities and milestones for the project.

##### Documentation Submissions after Contract Award

**The *Contractor* submits the following prerequisite documentation before any fabrication or work on Site commences for approval by the *Project Manager*.**

Letters of Good Standing for COID and SARS.

Site organogram and CV’s with qualifications and experience for all skilled workers. Police clearance certificates for all workers.

Safety Plan for approval. Based on the accepted programme, certified identity documents and medical fitness certificates are required for safety induction to be performed.

List of proposed Subcontractors to be used during implementation

Manufacturer’s quality certification records, Quality Control Plans (QCP’s) as per the accepted programme relating to all activities in the works.

Commencing from site establishment and during execution the *Contractor* completes and supplies a daily Site diary which includes details such as the labour resources available, starting time, ending time, equipment and materials used, and any interruptions.

The *Contracto*r ensures that the diary is submitted to the Project Manager or Supervisor daily for checking, commenting and signing-off and a copy is supplied. If the daily diary is not signed by each worker in attendance then a separate daily attendance register is supplied. Daily diaries include as a minimum the following:

* + - 1. Actual start time and end times of work for the day
      2. The number of people in attendance per trade
      3. Equipment used
      4. Progress made for the day
      5. Times and activities completed
      6. 07:45 Toolbox talk,
      7. Stop work times due to permit issues, etc.
      8. Estimated percentage completion achieved for that activity (Site Manager and Supervisors must plan work according to the project programme).

### Health and Safety Risk Management

1. The *Contractor* shall adhere to all OHS Legal requirements, OHS corporate policies, standards and procedures to which Eskom subscribes and as indicated on the issued SHE specification.
2. The *Contractor* shall, when coming on site, abide by the Cardinal Rules. These will be provided by the *Employer* on the start of the contract.
3. The *Contractor* shall also abide by the Eskom’s Safety, Health and Environmental Specifications for Contractors Procedure, , which will also be provided by the *Employer*.
4. The *Contractor* shall, when coming on site), make use of approved personal protective clothing such as overalls, safety shoes, safety hat, safety goggles, dust mask and gloves when necessary.
5. The *Employer* follows an accident prevention policy that includes the investigation of all accidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incidents. The *Contractor* is expected to fully co- operate to achieve this objective. The *Contractor* will report any incident and accidents to Project Manager within 24 hours. This report does not relieve the *Consultant* of his legal obligation to report certain incidents to the Department of Labour, or to keep records in terms of the Occupational Health and Safety Act, and Compensation for Occupational Injuries and Diseases Act.
6. The *Contractor* implements a safety plan and maintains the safety system until the completion of the whole of the works. The plan, will as a minimum, contain PPE information, written safe work procedures, job specific risk assessments, safety meetings, etc. The plan will be to the *Employer*’s satisfaction and will be accepted prior to the commencement of any work.
7. The *Contractor* will be subject to periodic audits by the *Employer* in order to ensure compliance with the plan. Any deviations will be corrected to the *Employer*’s satisfaction.
8. The *Service Manager* has the right to stop the *Contractor*'s work activities which, in the opinion of *Service Manager*, is un-safe. The *Contractor* may only continue with work activities when all safety deficiencies have been corrected to the *Service Manager’s* satisfaction. The *Contractor* shall have no claim against the *Employer* in respect of delay due to the above.

### Environmental constraints and management

1. The *Contractor* shall comply with Eskom environmental management system. This includes the identification, collection, storage, transportation, and disposal of waste.
2. Hazardous waste shall be disposed in line with the applicable environmental legislation. It is important to note that all spillages must be cleaned immediately and reported to the project manager as soon as possible.
3. It is the responsibility of the polluter to clean all spillages and for the rehabilitation of the polluted land and the cost associated with that.
4. The *Contractor* shall comply with the environmental criteria stated in the Environmental requirements provided in the tender package.

### Quality assurance requirements

1. The *Contractor* shall adhere to all quality requirements as noted in the quality evaluation criteria document issued as part of the tender package.
2. The Contractor implements a quality system and maintains the quality system until the completion of the whole of the Works. The system, will as a minimum, comply with the provisions of the ISO9001 and the Eskom Supplier Contract Quality Requirements Specification (240-105658000)The system will be to the Employer’s satisfaction and will be accepted prior to the commencement of any work on site.
3. The *Contractor* will be subject to periodic audits by the Employer in order to ensure compliance with the system. Any deviations will be corrected to the Employer’s satisfaction.
4. The *Employer* has the right to stop the Contractor's work activities which, in the opinion of the Employer, does not meet the requirements of the system and will have a detrimental effect on plant performance.
5. The *Contractor* ensures that all plant and materials for the Works are to the standard and quality accepted by the Employer and ensures that they are suitable for the purpose intended by the manufacturer.
6. The C*ontractor* shall ensure that they facilitate effective and efficient management of incident from the moment it occurs, until it can be audited and mitigated.

### Programming constraints

1. The *Employer* requires the works completed by the completion date specified.
2. The *Contractor* provides an initial programme with the tender submission. The Programme is aligned to section C2.2 - The Activity Schedule.
3. The *Contractor* provides a detailed, integrated programme to the Project Manager that incorporates all the work to be performed including that of his Subcontractor/s within two weeks of the starting date.
4. The programme is submitted electronically in MS Project format (2010 version or any other version which allows compatibility for viewing and editing) and provides all activities with expected durations, resource allocations and start and completion dates.
5. If the programme is suitable and agreed between the parties, the Project Manager accepts the programme otherwise he/she requests changes to be made before re-submission. The first Accepted Programme becomes the baseline programme and subsequent changes are labelled as revisions in numerical order.
6. Thereafter, the *Contractor* updates the programme on a weekly basis, including updating the actual dates and durations, while optimising remaining activities to ensure that the original planned completion date is met. The programme updates are submitted each Monday morning latest by 12:00.
7. Non-submission of the initial programme results in a twenty-five percent (25%) deduction from the first assessment amount due. This amount is only paid in the next assessment, dependent upon submission and acceptance of the programme.
8. Non-compliance to the completion date on the programme results in claims for delay damages by the *Employer*.
9. Completion of any activity on the programme is achieved only upon sign-off of the relevant hold/witness/surveillance point by the Project Manager.

### *Contractor*’s management, supervision and key people

Contractors Management shall be available for all meetings related to this contract whenever a need arises and they shall be available to their employees.

* + 1. Requirements
       1. Safety Officer - National Diploma with 3 years’ experience in Environmental Health, OR Safety Management and SAMTRAC.
       2. Quality Controller - National Diploma (Technical) plus 3 years plant experience.
       3. Project Manager - SACPCMP registration 3 - 5 years’ experience
    2. The resources listed above in 2.7.1 are for compliance related requirements. The *Contractor* shall ensure that the project is resourced accordingly and that all resources needed to execute this SOW are included in the activity schedule.

### Invoicing and payment

**Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Project Manager’s* payment certificate.**

##### The *Contractor* shall address the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

Name and address of the *Contractor* and the *Project Manager;*

The contract number and title;

*Contractor*’s VAT registration number;

The *Employer*’s VAT registration number 4740101508;

Description of service provided for each item invoiced based on the Price List;

Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT; (add other as required)

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

**Insurance provided by the *Employer***

**As stated for “Format A” available on** [*http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS\_Policies\_*](http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_) *From\_1\_April\_2014\_To\_31\_March\_2015.aspx*

### Contract change management

* + - 1. Any item that affects the prices or has the potential to do so, is immediately communicated to the Project Manager via an early warning and/or followed by a quotation and will be categorised as compensation event.
      2. After consideration, approval may be given by the Project Manager and the Contractor may implement the compensation event accordingly. All claims will not necessarily be approved as a compensation event nor do quotes have to be accepted unchanged since the Project Manager performs an evaluation and approves justifiable costs only.
      3. All invoices or documentary proof, calculations, invoices etc. are submitted to the Project Manager for assessment purposes.

### Training workshops and technology transfer

1. The Contractor provides guidance and training to the Employer’s personnel on the system.
2. The *Contractor* shall ensure that the maintenance and or operating philosophy is handed over to the

*Employer* and all the necessary training for the *Employer’s* employees is completed.

1. Proof of training provided to the Employer’s staff to be submitted to the Project Manager, for bond retention release.

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### Equipment required to be included in the *works*

1. The *Contractor* shall ensure that all equipment required to execute this scope is available before the commencement of each activity.
2. Any equipment, or appliances used by the *Contractor* conforms to the applicable OHS Act safety standards and is maintained in a safe and proper working condition.
3. The *Project Manager* has the right to stop the *Contractor* use of any equipment which, in the opinion of *Project Manager*, does not conform to the foregoing.

## Procurement

### People

##### Minimum requirements of people employed on the Site

1. The *Contractor* shall provide suitable and qualified resources and shall prioritize candidates around the allocated settlement through the local forum where they meet the requirements for the job.
2. Verifications of skills and qualifications will be conducted on all *Contractor* employees where a need arises.
3. The *Contractor* provides competent personnel with the relevant post qualification experience for the implementation of all of the works. All CV’s with relevant qualifications and detailed experience are submitted to the Project Manager within four weeks of the start date. All foreign qualifications to be certified by SAQA and proof of certification to be supplied. Foreign ID or passport holders also require a valid work permit to perform work.
4. The *Contractor* appoints either a Contract Manager or a Project Manager who possesses documented competencies to manage the duties related to the NEC contract and project management. This person serves as the direct liaison for the Employer’s Project Manager and also has the authority to make decisions and instruct all other Contractor’s personnel, as and when required.
5. The *Contractor’s* Contract Manager or Project Manager must as a minimum have a technical National Diploma (e.g. construction, industrial, civil, mechanical, electrical or C&I) and have completed either a contract or project management qualification or possess proof of attending appropriate training e.g. NEC ECC course. The Contract Manager or Project Manager is defined as the *Contractor’s* key person.
6. The *Contractor’s* Site Manager must as a minimum have a technical National Diploma (e.g. construction, civil, mechanical, electrical or C&I). Qualifications and training in contracts management and NEC3 will be advantageous. Two years related on-job project management or management experience is required in a technical discipline. The Site Manager is defined as the *Contractor’s* key person.
7. Supervisors are qualified and in possession of a valid National Diploma in a technical discipline (mechanical/industrial) and must have undergone supervisory training from a reputable institution. Two years of related experience is required. Supervisors must be knowledgeable about the conditions and Scope of Work contained in this contract and capable of overseeing the execution of the Scope of Work. Supervisors are defined as the *Contractor’s* key persons.

##### BBBEE and preferencing scheme

BBBEE requirements are specified in the Supplier Development Localisation and Industrialisation Target setting document provided with the tender package for this project.

### Subcontracting

##### 12.1 Preferred subcontractors

1. If the *Contractor* subcontracts work, he is responsible for providing the Works as if he had not subcontracted. This contract applies as if a Subcontractor’s employees and equipment was the *Contractor’s.*
2. The *Contractor* supports local Small, Micro and Medium Enterprises (SMME) by purchasing equipment, tools and materials locally where such equipment, tools and materials are available.
3. All Subcontractors need to be approved by the Project Manager before the Subcontractor may be allocated work by the *Contractor* or be brought to the Site.
4. Subcontract documentation and assessment of subcontract tenders shall be done by the *Contractor*
5. The *Contractor* must inform the Project Manager when intending to subcontract some of the works from the contract Scope of Work.
6. The *Contractor* may subcontract according to NEC contract or other types of contracts.
7. The *Contractor* submits the proposed contract data for each Subcontractor for acceptance to the Project Manager.
8. The *Contractor* only employs competent Subcontractors.
9. The *Contractor* indicates on a list as shown below, the names of any Subcontractors (when known) whose services may be used to provide the works. The *Contractor* provides a short description of the work it is proposed to sub-contract to each, together with an approximate value of the work to be executed by each. Where the Subcontractor is required to do physical work on Site, the *Contractor* provides details of the experiences of the mentioned Subcontractor as well as a list of references involving work of a similar nature.
10. Notwithstanding the inclusion of a Subcontractor name below, the *Contractor* obtains the written acceptance of the Project Manager prior to the employment of such Subcontractor.

|  |  |  |
| --- | --- | --- |
| **Subcontractor** | **Description of work** | **Approximate value** |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |

##### Subcontract documentation, and assessment of subcontract tenders

Subcontractors shall comply with all Eskom & all legal requirements and Eskom standards, and they remain the responsibility of the main *Contractor* and they shall be aligned to the Main *Contractor*. They shall adhere to Eskom ethics code.

##### Limitations on subcontracting

Where the *Contractor* encounters scenarios where specialised work is required, subcontracting of such services is to be obtained in agreement with the *Employer*. Refer to the Supplier Development Localisation and Industrialisation Target Setting document.

##### Attendance on subcontractors

1. Subcontractors shall remain the responsibility of the main *Contractor*. They shall adhere to the Employers code of ethics and comply with all the Employers requirements.
2. It is the Contractor’s responsibility to ensure that the Subcontractor(s) completes and supplies a daily Site diary, which includes details such as the labour resources available, starting time, ending time, equipment and materials used, weather conditions, interruptions etc.
3. The Contractor ensures that the diary is submitted by the Subcontractor to the Project Manager daily for checking, commenting and signing-off and a copy is supplied. If the daily diary is not signed off by each worker then a separate daily attendance register is supplied.

### Plant and Materials

##### Quality

1. The *Contractor* ensures that all equipment, tools and material that the *Contractor* / Subcontractor uses to execute the works, complies with the SABS and other stated standards.
2. All plant and materials sourced and supplied for the installation are new and all are free from defects. Reconditioned/refurbished plant and/or materials are NOT regarded as new under any circumstances and may NOT be utilised.
3. The *Contractor* does not use plant and materials, which are generally recognised as being unsuitable or otherwise unsuitable for the purpose for which they are intended.
4. Only components of high reliability are utilised, with a proven operating history, to enable the plant to achieve the required reliability and availability. Plant and material design, engineering and manufacture is in accordance with the best practice applicable to high-grade products of the type to be furnished, to ensure the efficiency and reliability of the works and the strength and suitability of the various parts for the works.
5. Plant and materials withstand ambient conditions and the variations of temperature arising under working conditions without distortion, deterioration or undue strains in any part.
6. No repair of defective plant and materials may be permitted without the Project Manager’s approval and any such repair, if approved, is carried out to the satisfaction of the Employer.

##### Plant & Materials provided “free issue” by the *Employer*

* + - 1. The Employer supplies and installs scaffolding; refer to section 5.1.9, Scaffolding, for requirements regarding the installation of scaffolding.
  1. ***Contractor*’s procurement of Plant and Materials**

1. Absolutely no changes to the current plant configuration will be allowed unless authorised by the

*Employer*.

1. Works Information.
2. The *Contractor* shall only procure plant and materials as specified in the Works Information. Any change of specifications is notified in writing by the Project Manager as an instruction.
3. The *Contractor* shall provide the procurement schedule and integrated into the Contractor’s accepted project programme ensuring delivery of equipment to site in advance to the installation activity
4. The *Contractor* shall ensure all items procured and stored at the *Contractor’s* premises or the
5. *Employer’s* premises are stored in accordance with the manufacturer’s or material’s specifications.
6. The *Contractor* shall ensure that plant and materials procured carry a minimum of 52 weeks warranty or guarantee period due to defect or malfunction.

### 13.4 Tests and inspections before delivery

* + - * 1. The *Project Manager* reserves the right to appoint a representative or representatives to inspect all parts during manufacturing and testing and to be present at any of the tests specified in this *works*.
        2. The *Employer’s* representative/s and/or third-party/independent inspection authority must have unhindered access to witnessing all manufacturing and testing processes at the manufacturing facility.

representative/s and/or third-party/independent inspection authority.

* + - * 1. Where holding points exist on the manufacturing QCP’s, no manufacturing activity shall proceed if the preceding activity on the manufacturing QCP was not approved by both the *Contractor* and *Employer’s* representatives.
        2. The *Employer* carries out quality inspections at his discretion and as per the pre-approved Quality Control Plan (QCP).
        3. Such tests as may be required by the *Project Manager* are carried out by the *Contractor* during or after manufacturing to prove compliance with the specification independently of any test which may have been carried out at the manufacturer’s facility.
        4. The *Contractor* is not relieved of his responsibilities if the *Project Manager* and other *Employer*

representatives choose to waive the witnessing of any manufacturing and testing processes.

* + - * 1. The *Contractor* provides a test certificate for each test required by the code. Specimen tests used by the *Contractor* are also submitted.
        2. The *Contractor* provides current calibration certificates for all equipment used during manufacturing and testing when required to do so by the *Project Manager*.
        3. The *Contractor* is responsible for quality assurance and control during manufacturing and testing. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the *Employer* (including the absence of disapproval) shall not

relieve the *Contractor* from any responsibility under the *Contract*, including responsibility for errors, omissions, discrepancies and non-compliances.

* + - * 1. The *Contractor* takes note of and responds to any comments made by the *Employer* on the *Contractor’s* manufacturing documents. However, the *Employer* is not bound to check the *Contractor’s* manufacturing documents for any errors, omissions, ambiguities or discrepancies or compliance with the requirements of the Works Information. The *Employer’s* receipt of, or review of, or comment on, the *Contractor’s* manufacturing documents does not relieve the *Contractor* from responsibility for the *Contractor’s* errors or omissions or departure from the requirements of the standard.
        2. The Contractor shall test, Inspect and certify that the system is reliable and safe to use before takeover.
        3. The Contractor shall provide all test/inspection certificates.

### Marking Plant and Materials outside the Working Areas

All plant and material shall be properly marked for identification.

### *Contractor*’s Equipment (including temporary works).

1. The *Contractor* shall use inspected and tested equipment, equipment compliance documents shall be made available on request by the *Employer*.
2. All temporary works shall be removed after completion.

**Cataloguing requirements by the *Contractor***

The Contractor shall provide all the information (Specifications) required by the Employer to catalogue the spares for this system.

## Construction

### Temporary works, Site services & construction constraints

##### *Employer*’s Site entry and security control, permits, and Site regulations

1. The *Contractor* makes his/her own assessment of, and allows in his/her rates for those access problems that may be encountered. No extra payment or claim of any kind is allowed on account of difficulties of access to the works, or for the requirement of working adjacent to or in the same area as others.
2. Access to site shall be in line with the Eskom’s access procedure. The *Contractor* shall be required to make an application to enter site for the duration of the contract, including the warranty and defect period where applicable. A permit shall only be issued once the *Contractor* and his or her employees have attended the safety induction and has undergone medical checks.
3. All *Contractor* permits shall be returned to Protective Services on completion of the works.
4. The *Contractor* shall adhere to site access control requirements; all *Contractor* employees including sub-*Contractors* shall undergo medical screening and be declared fit to work.
5. The *Employer* will provide induction to all *Contractor* employees and sub-contractors before the *Contractor* can start working, the *Contractor* shall have a safety file approved by the Employer before all employees can be issued with site access permits.

##### Restrictions to access on Site, roads, walkways and barricades

1. Note that the speed limit on the site is 40 km/h .The vehicle permit of any persons contravening any traffic act on site shall be cancelled.
2. The *Contractor* complies with the Eskom’s Site Regulations, a copy of which is available for perusal at the *Employers* offices.
3. Any subject within the authority of the *Employer* may be addressed by a Site Regulation. Before work starts on site, an inaugural meeting is held with the *Contractor* and the *Employer* to explain all requirements of the Site Regulations.

##### People restrictions on Site; hours of work, conduct and records

1. The Contractor records information of all those that enter the *Employer*s site. This information is to be presented to the *Employer* on the day of the site visit.
2. Working hours at Eskom Megawatt are as follows: Monday – Thursday : 07:30 to 16:30

Friday : 07: 30 to 16:30

Saturday, Sunday and Public Holidays : Off

##### Health and safety facilities on Site

1. The Contractor shall comply with Health and Safety requirements, Refer to the SHE spec provided.
2. The *Employer* and the *Contractor* shall provide services and other things as stated in the works Information. Any cost incurred by the *Employer* as a result of the *Contractor* not providing the services and other things which he is to provide is assessed by the *Project Manager* and paid by the *Contractor*.

##### Title to materials from demolition and excavation

The Contractor has no tittle to demolition and excavation materials unless if the agreement is reached between both parties and authorised by the *Employer*.

##### Cooperating with and obtaining acceptance of Others

1. The *Contractor* co-operates with others in obtaining and providing information and access which they need in connection with works. Refer to clause 25 ( 25.1) in NEC3 ECC.
2. The *Contractor* shall share the program so as to allow other contractor to plan, should there be work that needs to be executed in the same area and for program integration by the *Employer*.

##### Publicity and progress photographs

1. The *Contractor* shall not share the *Employers* plant photographs or any other information without prior approval by the *Employer*.
2. Such conduct is regarded as a deviation and there will be legal actions taken against the *Contractor.* The *Contractor* shall seek approval before taking any photographs on the *Employers* site or of any other information concerning this project.

***Contractor*’s Equipment**

1. Any equipment, or appliances, used by the *Contractor* conforms to the applicable OHS Act safety standards and is maintained in a safe and proper working condition. The *Project Manager* has the right to stop the *Contractor* use of any equipment which, in the opinion of *Project Manager*, does not conform to the foregoing.
2. Off-loading and material handling equipment is not available on site and if required, is to be provided by the *Contractor*.
3. The contractor shall declare all equipment/tools on arrival to security and keep a record at all times.

**Equipment provided by the *Employer***

N/A

##### Site services and facilities

The *Contractor* shall provide services such as water, electricity and everything else necessary for providing the works. Refer to clause 25 (25.2) in NEC3 ECC.

**Facilities provided by the *Contractor***

1. At his own cost, the *Contractor* provides his/her own accommodation and transport for all his/her employees engaged in the execution of the works. This includes the needs of his/her sub- *Contractors*.
2. The *Contractor* shall provide his/her own office equipment, storage, vehicles and all these shall be declared on site entry. Any un- roadworthy vehicles will not be allowed in the *Employers* premises.

##### Survey control and setting out of the *works*

The *Contractor* shall do thorough risk assessments to ensure the area is safe to work on.

##### Control of noise, dust, water and waste

1. The *Contractor* maintains a high standard of cleanliness during the conduct of his activities at the Power Station. This includes areas allocated for storage of materials, Site offices etc. to the satisfaction of the *Project Manager.* The *Contractor* keeps these areas clean and free from accumulation of waste materials and refuse regardless of the source.
2. The *Contractor* ensures during sweeping and dusting, that a minimum amount of dust is liberated into the atmosphere. Cleaning by vacuum cleaners is preferred and the use of compressed air for cleaning plant and personnel is prohibited.
3. The *Contractor* is responsible for the prompt removal of all waste to the correct waste disposal facility.
4. For the purpose hereof, “waste” any matter, whether liquid or solid or any combination thereof, which is a by-product, emission, residue or remainder of any process or activity carried out in connection with the *works* and which is not reused on the Site in the ordinary course of carrying out the *works* within seven days of production.
5. Bins and containers are emptied and the waste removed to the designated area at least once a week. The entire temporary and waste removed to the designated area at least once a week. All the temporary storage areas for bins and containers are kept tidy and do not constitute a nuisance to others. The *Contractor* takes all required steps to avoid spillage of waste alongside the bins and containers during removal and disposal thereof.
6. No burning of waste is allowed on site.
7. Hazardous waste is dealt with in accordance with the safety, health and/or environmental requirements of the *works* and the *Contractor* is solely responsible for the proper disposal thereof.
8. The *Contractor* removes all scrap metal components from the plant and takes them to the skips or laydown area allocated on site. All hazardous waste e.g. contaminated metals and plastic, sludge, rubble, electronic waste etc. is removed by the *Contractor* off site to a registered, hazardous waste site and the relevant disposal certificates supplied. General waste is disposed of by the *Contractor* of in skips and bins located on site.
9. Items containing copper is stripped by the *Contractor* and the copper is taken to the laydown area as idemtified.

##### Sequences of construction or installation

The *Contractor* shall follow the construction program sequence, if there are changes (where access should be given to Others or for any other valid reason), this should be communicated to the Project Manager and the Project Manager shall approve before the sequence can be changed.

##### Hook ups to existing works

1. The *Contractor* shall notify the *Employer* of any activities that requires hooking up, before any structure can be used for hooking up the *Employer* shall declare such structure safe for hooking up.
2. The *Contractor* shall hook up at heights, this is one of the lifesaving rules.

### Completion, testing, commissioning and correction of Defects

##### Work to be done by the Completion Date

1. The *Contractor* ensures that all work is completed on or before the completion date.
2. The Project Manager cannot certify Completion until all the work has been done and is free of Defects, which would have, in his opinion, prevented the Employer from using the works and others from doing their work.
3. Acceptance of the “As-built” documentation is a pre-requisite for commissioning to be done and to certify completion of the works.

|  |  |  |
| --- | --- | --- |
|  | **Item of work** | **To be completed by** |
|  |  |  |
|  | Performance testing of the *works* in use as specified in 1.3 of this Works Information. | On completion |
|  |  |  |

##### Take over procedures

1. When a plant section is commissioned, the Project Manager arranges for the takeover of the plant. Such approvals affect the transfer of the asset and the control of the plant from the Contractor to the Employer. This means the transfer of statutory accountability.
2. The takeover of the completed plant is done for specific plant areas not dependent on the systems.

##### Materials facilities and samples for tests and inspections

The *Contractor* shall use any facilities as he sees fit and reliable for tests and inspection. He shall ensure that they are safe to be used.

##### Commissioning

1. The plant is also cleaned of waste, scrap and debris and equipment removed.
2. Thereafter, the Contractor submits all completed QCP’s, data sheets, material certificates, operating and maintenance manuals, drawings etc. to the Employer to first verify that commissioning may be planned.
3. The Contractor conducts both cold and hot commissioning together with the Employer’s personnel.
4. The Contractor ensures that proper housekeeping is done again before re-instating the plant.
5. The Contractor shall demonstrate to the Employer that there is redundancy, and the system is fully functional (eg. pulling of alarm and events reports and trending of signals). Server and Switch fail over tests shall be done in the presence of the Employer.

##### Access given by the *Employer* for correction of Defects

1. The defect(s) is/are reported to the Contractor as soon as the Employer becomes aware thereof.
2. An opportunity is arranged by the Employer for the repair and the Contractor is notified at least 48 hours in advance of the opportunity to repair the defect(s).
3. It is the Contractor’s responsibility to get the Safety Plan checked and approved again, if necessary and to apply for Site access permits before any work can commence on Site.

##### Performance tests after Completion

1. The Contractor supplies a schedule and program of all tests that are to be carried out in preparation for commissioning and indicates the details of tests he/ she proposes to perform and the manner in which the results of tests will be documented.
2. The Contractor provides final inspection reports for all components installed and test certificates for all tests performed i.e. inspection reports, etc.
3. Where the results of the performance tests performed don’t correlate with expected results and/or the control functions as per the operating philosophy do not meet the specifications guaranteed, the Contractor, at his own expense, shall carry out all necessary adjustments and configurations to the works required as per the Scope of Work.

### Electrical engineering works

All works to be done in accordance with the scope of work document which details the entire scope at hand with all the technical specifications for the works.

## List of drawings

**Drawings issued by the *Employer***

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract. Drawings included in the works information.

Note: Some drawings may contain both Works Information and Site Information.

|  |  |  |  |
| --- | --- | --- | --- |
| **Eskom Drawing number** |  | **Revisio**  **n** | **Title** |
|  |  |  |  |
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## PART 4: SITE INFORMATION

|  |  |
| --- | --- |
| Site : | Duvha Power Station |
| Regional Authority : | Emalahleni Council, Mpumalanga Province |
| Nearest Towns: | Emalahleni, Bethal, Secunda |
| Infrastructure : |  |
| Latitude & longitude : | 25.8728° S, 29.2553° E |
| Landowner : | Government |
| River catchment : | Mid-Vaal |

CONTRACT ECC3 COVER PAGES